

Osher Lifelong Learning Institute, Winter 2022 Contemporary Economic Policy

Dartmouth College April-May, 2023

Host: Jon Haveman, Ph.D.
National Economic Education Delegation



Available NEED Topics Include:

- US Economy
- Healthcare Economics
- Climate Change
- Economic Inequality
- Economic Mobility
- Trade and Globalization
- Minimum Wages

- Immigration Economics
- Housing Policy
- Federal Budgets
- Federal Debt
- Black-White Wealth Gap
- Autonomous Vehicles
- Healthcare Economics



Submitting Questions

- Please submit questions in the chat, or by raising your digital "hand."
 - I will try to handle them as they come up.
- We will do a verbal Q&A once the material has been presented.
- Slides will be available from the NEED website tomorrow (https://needecon.org/delivered_presentations.php)
- PLEASE NOTE THE NEW URL: NEEDEcon.org



Course Outline



Contemporary Economic Policy

- Week 1 (4/3): US Economic Update (Geoffrey Woglom, Amherst College)
- Week 2 (4/10): Monetary Policy (Geoffrey Woglom)
- Week 3 (4/17): Healthcare Economics (Jon Haveman, NEED)
- Week 4 (4/24): Trade and Globalization (Alan Deardorff, University of Michigan)
- Week 5 (5/1): Trade Deficits and Exchange Rates (Alan Deardorff)
- Week 6 (5/8): Cryptocurrencies (Jon Haveman)





Trade and Globalization

Alan V. Deardorff University of Michigan

Presentation to Dartmouth College April 24, 2023



THE WALL STREET JOURNAL.



Impact of Russia-Ukraine War



- How Russia-Ukraine war impacts globalization
 - War itself disrupts trade, especially exports of
 - O Ukraine: wheat
 - o Russia: wheat, oil
 - Economic sanctions by governments disrupt
 - Financial linkages
 - o Trade
 - Private companies stop dealing with Russia



Impact of Russia-Ukraine War



• Financial sanctions by US, EU, UK, and others

- Frozen foreign-held assets of individuals, Putin and dozens of others
- Restrictions on Russia's Central Bank's use of international reserves
- Several Russian banks removed from the Swift international payments system
- Cut off many Russian banks from transactions and operations
- Long list of Russian companies banned or restricted
- Possible restrictions on Russia borrowing from IMF and World Bank



Impact of Russia-Ukraine War

Trade sanctions by governments

- Oil and other energy
 - Germany puts Nord Stream 2 gas pipeline on hold
 - US bans from Russia
 - UK to phase out Russian oil by end of 2022
 - EU to become independent from Russia by 2030
- EU bans steel imports from Russia
- US restricts exports to Russia, especially technology and military; later also to Belarus; later also luxury goods
- EU and UK impose export restrictions similar to US
- Ban on Russian air carriers by Canada, EU, US, UK
- G-7 to revoke Russia's most favored nation status
 - Permits them to raise tariffs on Russian goods

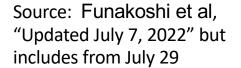






Russia Sanctions, Gov't

Countries		
Australia	Iceland	Singapore
Bahamas	Italy	Switzerland
Canada	Japan	Taiwan
EU	New Zealand	UK
Finland	Norway	US
France	Poland	
Germany	S Korea	









Russia Sanctions, Gov't

Russian Targets								
Airlines	2		Generals	1		Oligarchs	23	
Banks	9		Government	1		Retail	1	
Cnt. Banks	5		Lawmakers	2		Ships	5	
Commodity	1		Lux. goods	1		Sv with fnd	1	
Companies	19		Media	2		Tax service	1	
Economy	3		Mil. Comps.	14		Tech	1	
Entities	3		Mining	2		Transit	1	
Finance	1		Oil	2				
Gas	1		Oil imports	6				

Source: Funakoshi et al, "Updated July 7, 2022" but includes from July 29







Russia Sanctions, Gov't



• Countries announcing they would <u>not</u> use sanctions against Russia:

NOT using sanctions				
India	Feb 24			
Mexico	Mar 1			
Brazil	Mar 1			
China	Mar 2			
Argentina	Mar 4			
Indonesia	Mar 9			
Turkey	Mar 13			
S Africa	Mar 17			
Serbia	Apr 21			

Source: Bown



Leaving Russia

253 companies, including ...















































Suspending activity

248 companies, including ...

















































Sold all stores May 20. Stores will operate under new brand.

Source: New York Times, April 7, 2022 Thermo Fisher SCIENTIFIC









Scaling back activity

75 companies, including ...





























Halting investments

96 companies, including ...

























Staying the course

162 companies, including ...











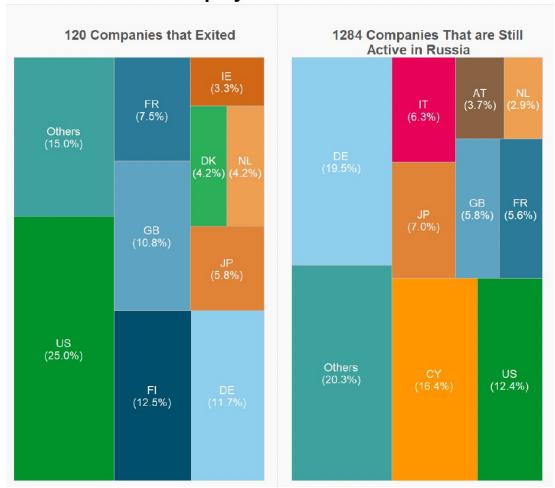




Country of origin of EU and G7 Companies with an Equity Stake in Russia

But... Recent study reports:

"Less Than Nine Percent of Western Firms Have Divested from Russia"



Source: Evenett and Pisani, December 20, 2022

The New York Times, March 2, 2023:

Leave Russia? A Year Later Many Companies Can't, or Won't.

Not all Western companies packed up and left Russia after its invasion of Ukraine. Some say Moscow has tied their hands, while others choose to stay put.

Effect of Sanctions



Will they stop Russia?

- Clearly no
- Sanctions in the past have only sometimes worked

Will they reduce trade?

- They did
- But Russia's role in trade is not large in most products
- Short-term effects are greater from the war itself







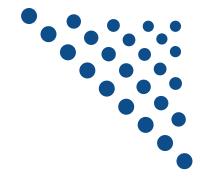
- What is Globalization?
- Pros and Cons of Trade
- Trade Policies
- The Role of Trade Agreements & WTO (if time)



What Globalizations Is

- Growth over time of many economic interactions between countries
 - Trade
 - Global Value Chains
 - Foreign Direct Investment
 - Financial Flows
 - International Travel
 - Migration
- I will focus here on trade





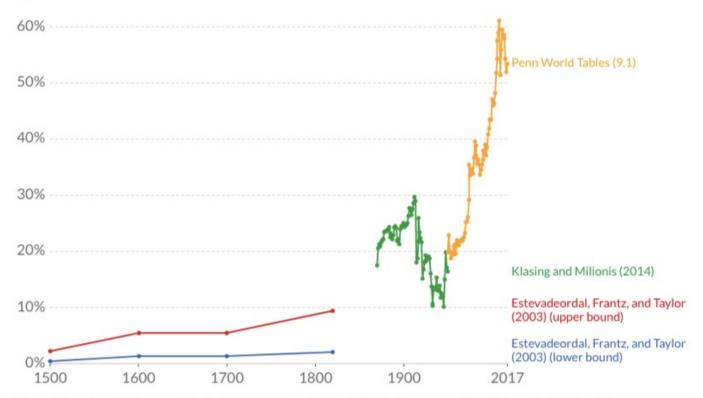
Trade



Globalization over 5 centuries



Shown is the "trade openness index". This index is defined as the sum of world exports and imports, divided by world GDP. Each series corresponds to a different source.



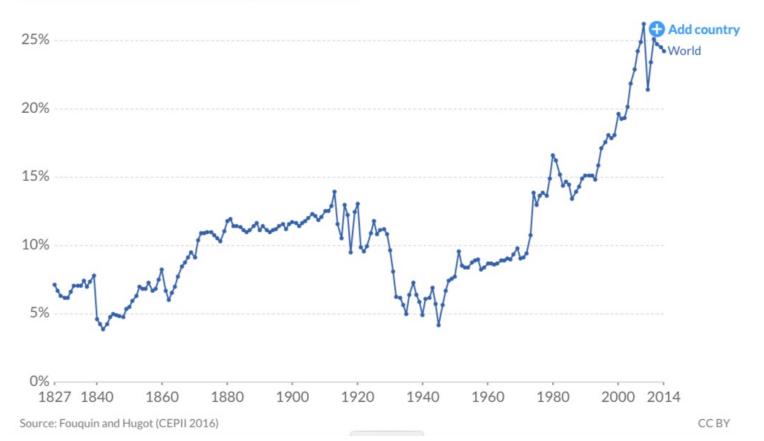
Source: Estevadeordal, Frantz, and Taylor (2003), Klasing and Milionis (2014), Feenstra et al. (2015) Penn World Tables 9.1

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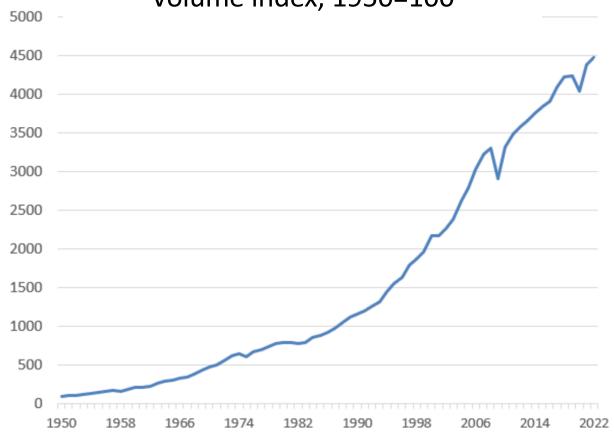
Value of exported goods as share of GDP

Estimates correspond to merchandise export-to-GDP ratios.



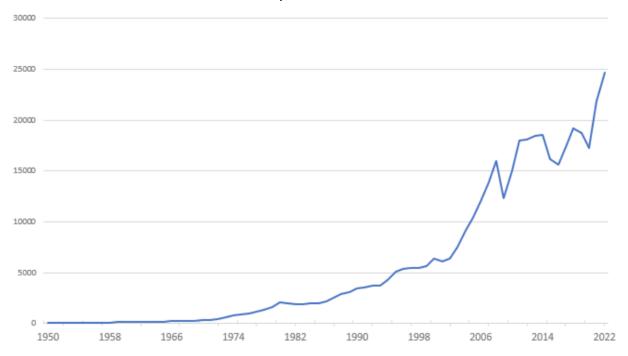


Evolution of World Trade, 1950-2022 Volume index, 1950=100



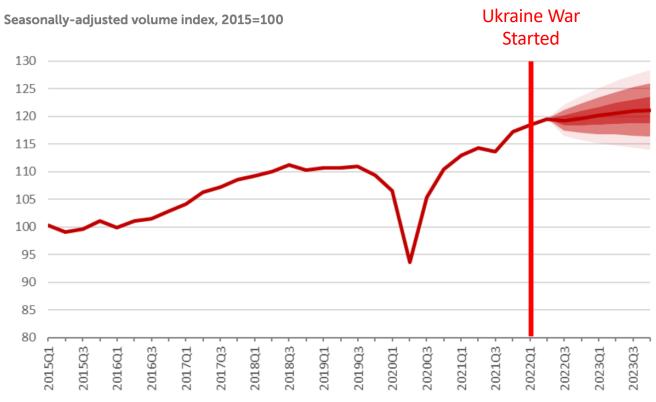
Source: WTO

Evolution of World Trade, 1950-2022 Values, Billion USD



Source: WTO

Chart 1: Volume of world merchandise trade, 2015Q1-2023Q4

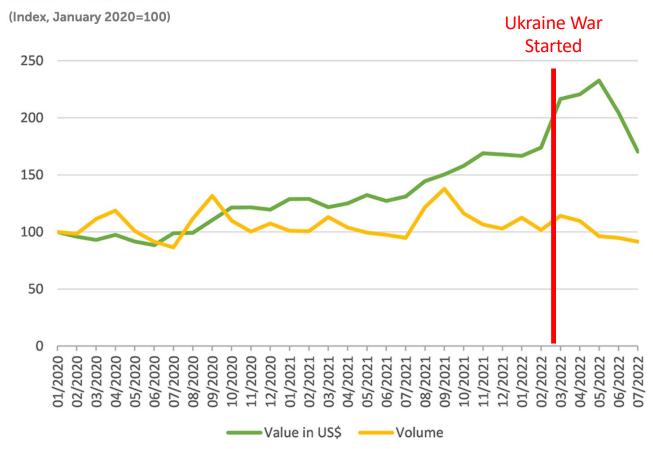


Note: Each shaded region represents a +-0.5 standard error band around the central forecast.

Source: WTO Source: WTO and UNCTAD, WTO Secretariat estimates.

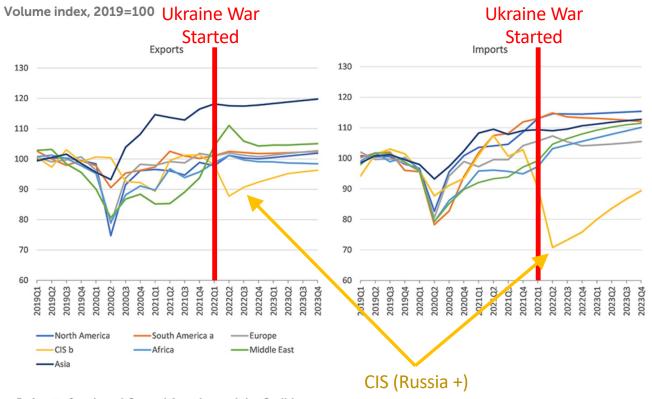
10/5/22

Chart 3: Estimated value and volume of world trade in wheat, January 2020 - July 2022



Source: WTO 10/5/22

Chart 4: Merchandise exports and imports by region, 2019Q1-2023Q4



a. Refers to South and Central America and the Caribbean.

Source: WTO

10/5/22

b. Refers to the Commonwealth of Independent States, including certain associate and former member States. Source: WTO and UNCTAD.



Global Value Chains



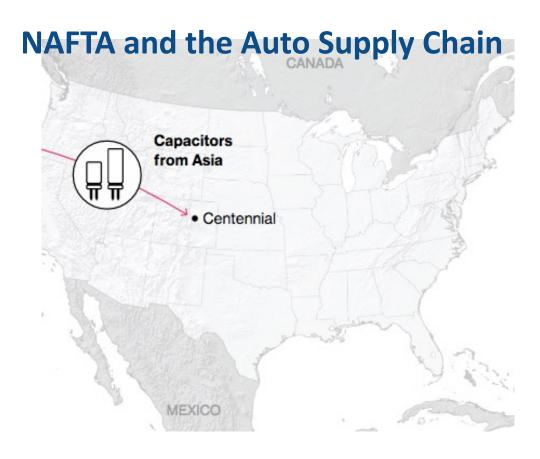
Effects on Economies



Supply Chains

- Globalization has created long and complex international supply chains

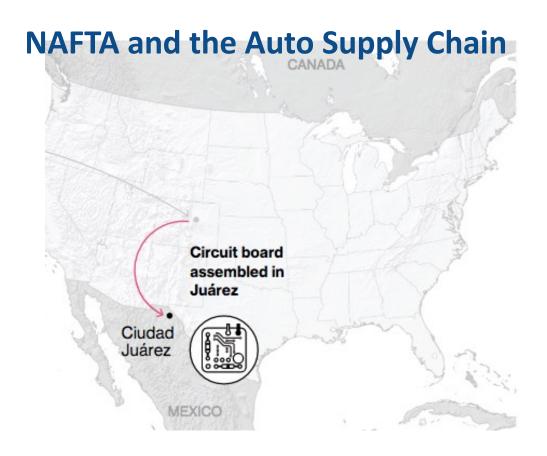








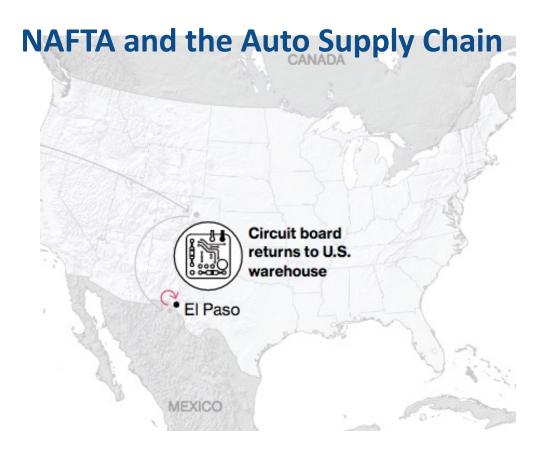
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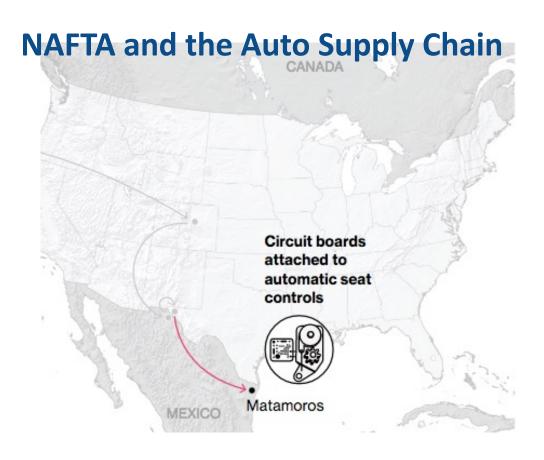
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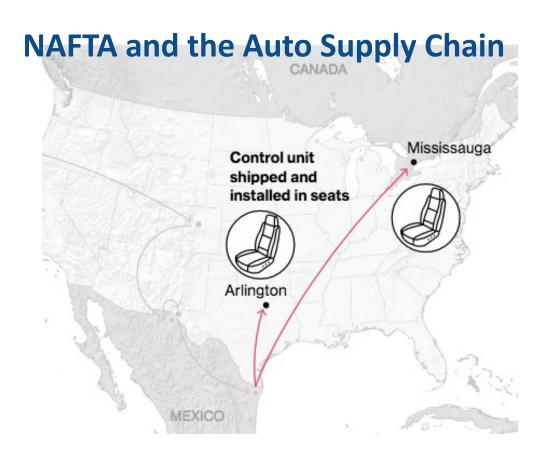
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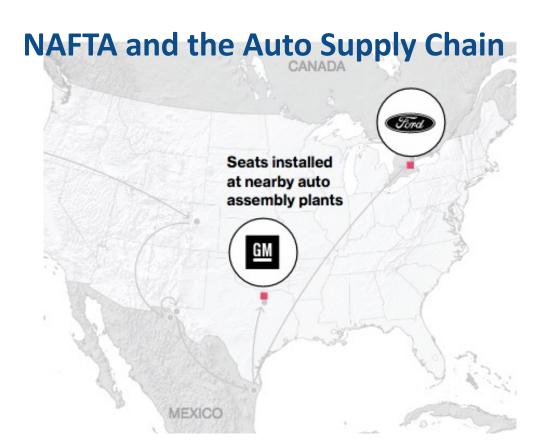
NATIO Black, Diamond, and Merrill, "One Tiny Widget's Dizzying Journey Shows Just How Critical Nafta Has Become," Bloomberg, February 2, 2017.







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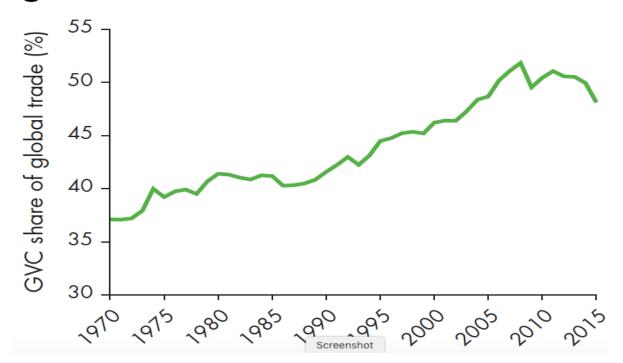


NATIO EDUCA Black, Diamond, and Merrill, "One Tiny Widget's Dizzying Journey Shows Just How Critical Nafta Has Become," *Bloomberg*, February 2, 2017.

Growth of Global Value Chains, 1970-2015

Figure 1.2 GVC trade grew rapidly in

the 1990s but stagnated after the 2008 global financial crisis



Source: World Development Report 2020

Frame exports Saddle exports Brake exports China: US\$977 million China: US\$100 million Japan: US\$200 million Vietnam: US\$147 million Italy: US\$85 million Singapore: US\$172 million Italy: US\$66 million Spain: US\$16 million Malaysia: US\$152 million Countries mentioned: China France Italy Japan Malaysia Singapore Spain Vietnam Pedal and crank exports Wheel exports Japan: US\$150 million China: US\$170 million Italy: US\$28 million China: US\$137 million France: US\$26 million Singapore: US\$117 million

Figure 1.1 Where do bicycles come from?

Source: World Development Report 2020

Supply Chains



• Example: The iPhone assembled in China from parts:

Part	Come from
Accelerometers	Germany, the US, South Korea, China, Japan, and Taiwan.
Audio chips	US, UK, China, South Korea, Taiwan, Japan, and Singapore.
Batteries	Samsung (South Korea), which has factories in eighty countries.
Cameras	Qualcomm (US) and Sony (Japan), both with plants in many countries
Chips for 3G/4G/LTE networking	Qualcomm (US)
Compasses	AKM Semiconductor (Japan) with plants in the US, France, England, China, South Korea, and Taiwan.
Glass screen	Corning (US) with plants in twenty-six countries.
Gyroscopes	Switzerland
and many more	

Source: Krueger 2020, International Trade (What Everyone Needs to Know), p. 254



GVC linkages, 2015 Low participation Limited commodities High commodities Limited manufacturing Advanced manufacturing and services Innovative activities Data gaps IBRD 44640 | AUGUST 2019

Map 1.1 All countries participate in GVCs—but not in the same way

Source: World Bank

Pros and Cons of Globalization



Pros and Cons of Globalization

- Gains from Trade
 - Theory of Comparative Advantage
 - Other Sources of Gain from Trade
- Costs of Trade

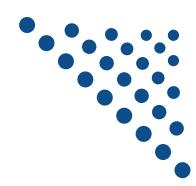




Gains from Trade Theory of Comparative Advantage



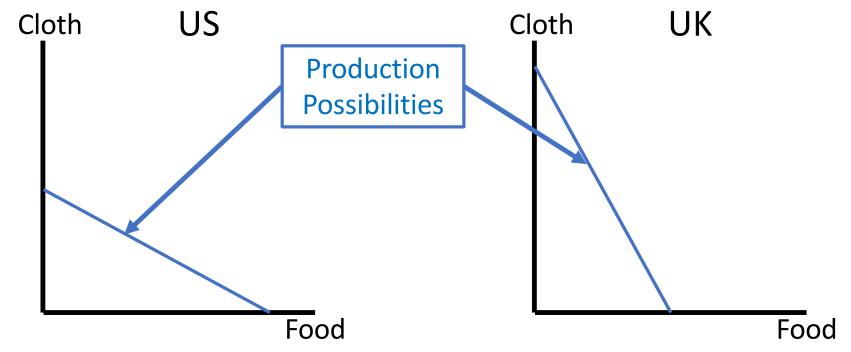
Comparative Advantage



- The Theory of Comparative Advantage says:
 - Countries can gain,
 - By producing
 - More than they need of what they do relatively best, and
 - Less than they need of what they do relatively worst
 - And exporting the extra to other countries in exchange for what they need
 - By doing that, ALL countries can
 - Get more of everything, if that's what they want, and therefore
 - Gain from trade
- Illustration with a graph of just 2 countries & 2 goods

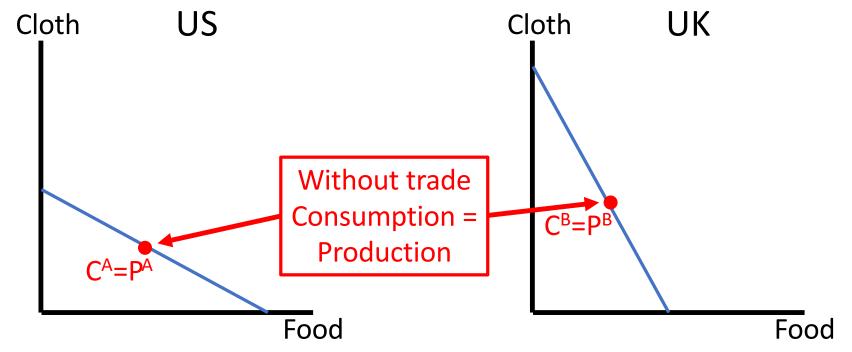


Comparative Advantage If US & UK differ in what they can produce...



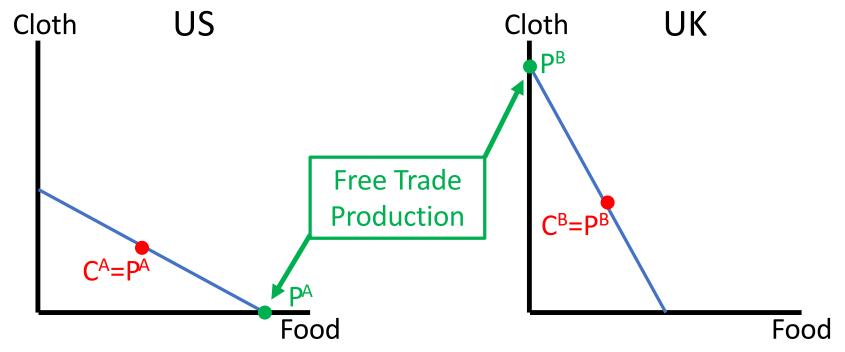


Comparative Advantage ... Without trade, their consumption will also differ...



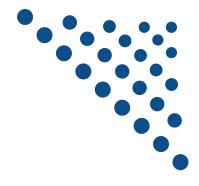


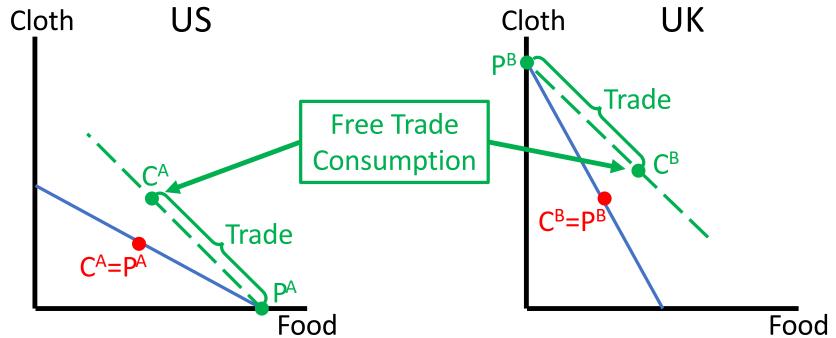
Comparative Advantage ... With free trade, they specialize in what they do best...



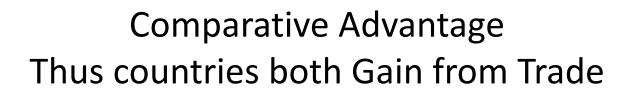


Comparative Advantage ... And can consume more by trading.

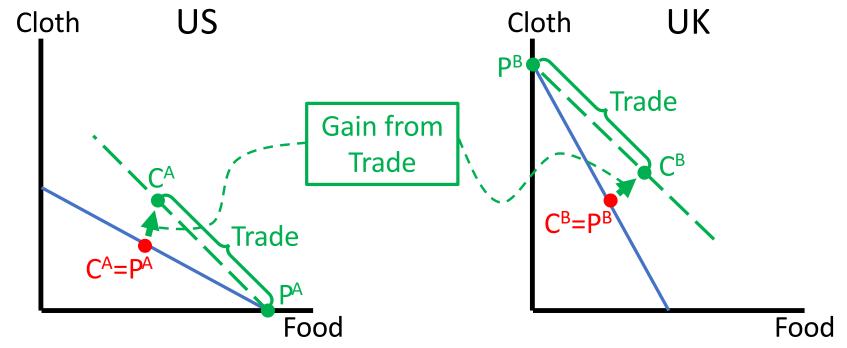






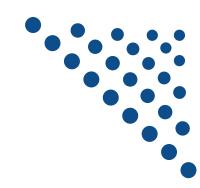








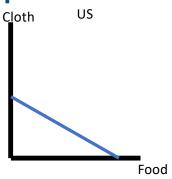
Sources of Comparative Advantage



• Differences in countries' production possibilities



- Resources
 - Labor
 - o Land
 - o Capital
- Technologies (know-how)







Generality of Comparative Advantage



The Theory of Comparative Advantage requires:

- "Perfect competition" (i.e., all buyers and sellers are very small)
- Absence of market "distortions" (externalities, etc.)
 - i.e., reasons why supplies and demands don't reflect true costs and benefits

• The Theory of Comparative Advantage does <u>not</u> require:

- Any limit on numbers of goods, factors, and countries
- That only final goods are traded (thus consistent with supply chains)
- That factors (labor, capital) be immobile between countries
 - (However, the gains from trade then accrue to countries including their mobile-factor owners.)

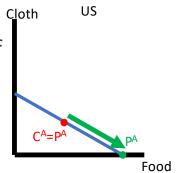


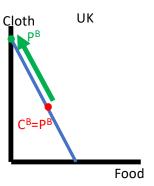
Generality of Comparative Advantage



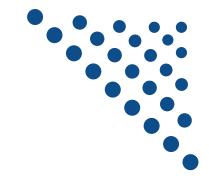
But note:

- Nothing in the theory says that everyone in each country gains
- Opening to trade requires
 - o Some industries to shrink or disappear while others expand
 - Firms and workers in shrinking industries
 - · Certainly lose during the transition
 - May be permanently worse off
 - In example, losers are producers of
 - Cloth in US
 - Food in UK









Gains from Trade Other Sources of Gain from Trade



Other sources of Gain from Trade



- Productivity (most productive firms expand and export)
- Returns to scale (small countries can support larger firms)
- Competition (monopolies in small countries lose market power)
- Variety (buyers, both consumers and firms, can access more choices)
- Supply chains (firms can source parts from cheapest or best sources)
 - (That's really just the above, but within industries and firms.)
- Technology (producers get access foreign technologies)





Costs of Trade



But there are Costs

• Economic:

- When trade expands (or contracts)
 - Some firms lose market share or shut down
 - o Other firms supplying inputs to those firms shrink or shut down
 - Workers in both lose jobs
 - And their communities lose customers
- Macroeconomic cost: Vulnerability to foreign recession/inflation
- Dependence on other countries' willingness to trade
- Vulnerability to trade disruption
 - o Crisis induced (earthquake, flood, disease, war)
 - Policy induced (sanctions, tariffs, export bans)

Non-economic

- Loss of cultural differences
- Spread of invasive species and plant disease
- Spread of human disease









Pause for

- -Questions
- -10-Minute Break
- Next: Trade Policies



Trade Policies that Affect Globalization



- Policies that <u>En</u>courage It
 - Tariff Reductions
 - Trade Agreements
 - Other
- Policies that <u>Dis</u>courage It
 - Trump's Tariffs
 - Trade War





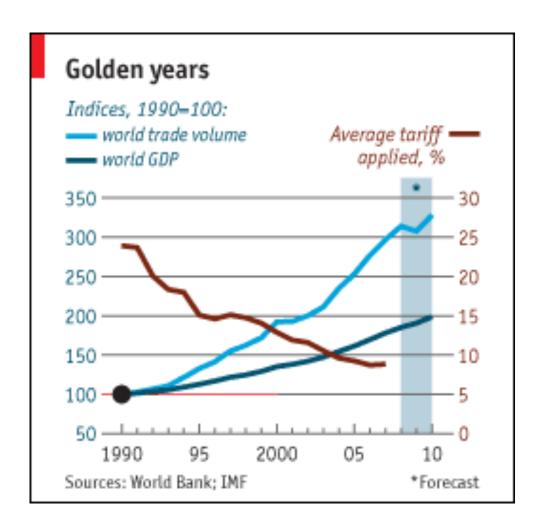
Policies that Encourage Globalization





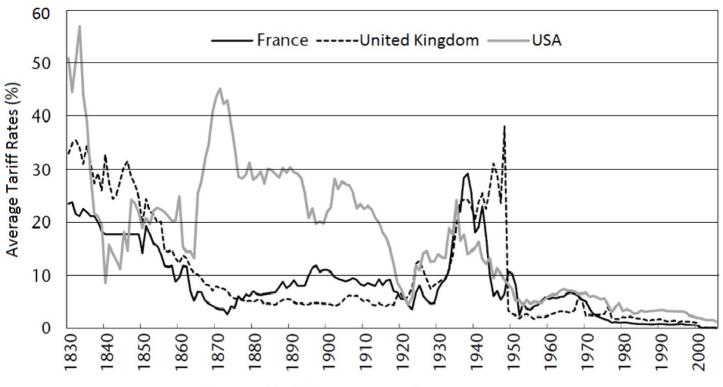
Tariff Reductions





Source: Economist

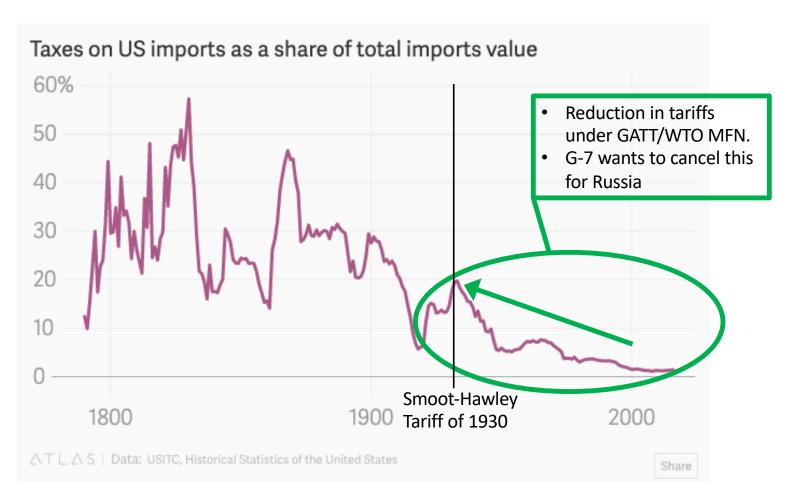
Average tariff rates (France, UK, US)



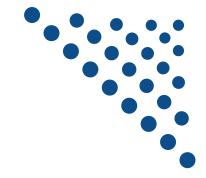
Average Tariff Rates on Total Imports, 1830-2010

Sources: Imlah, Economic Elements

Source: Wikimedia Commons

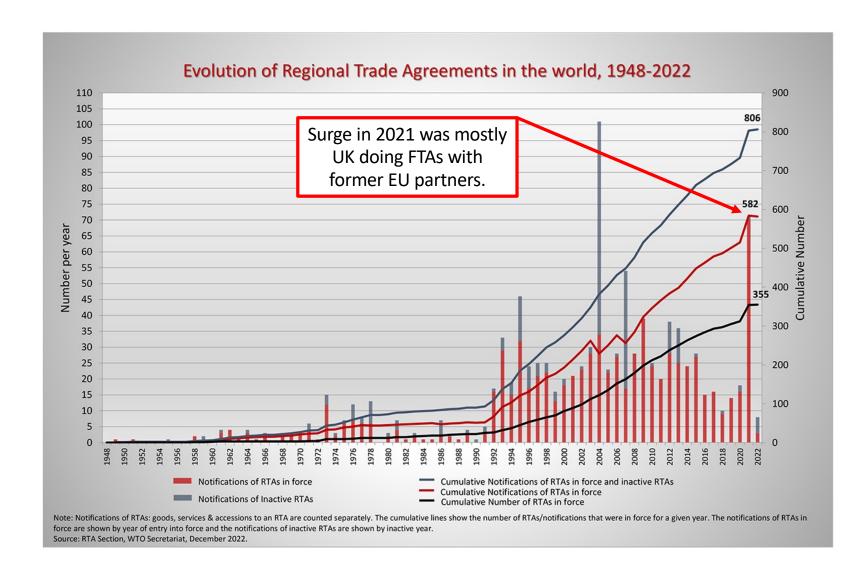


Source: Quartz 2018



Trade Agreements





Source: WTO

European Union



Source: Europa.eu

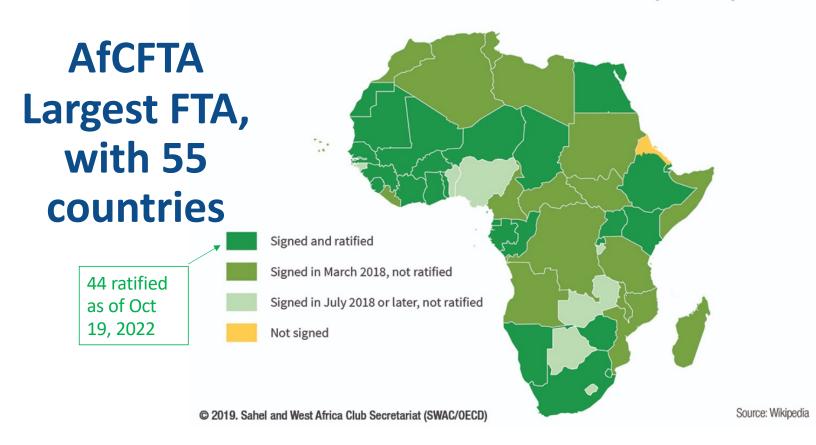
NAFTA (now USMCA)



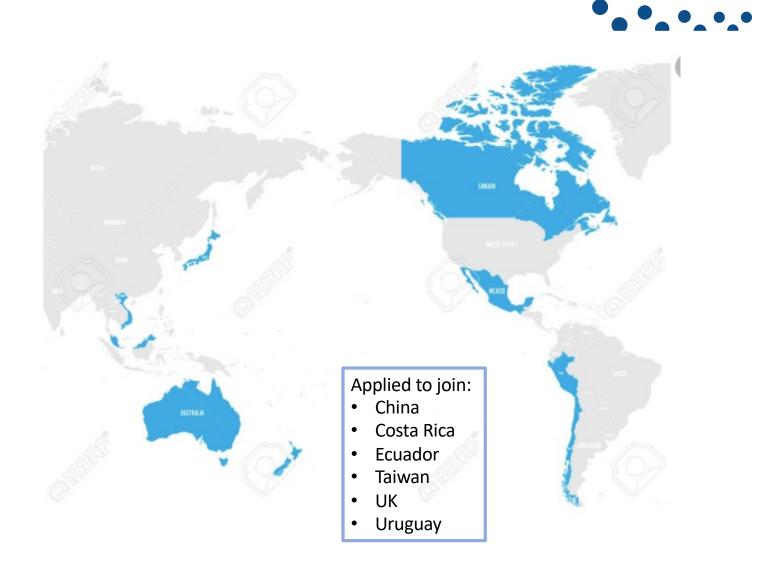
MERCOSUR



THE AFRICAN CONTINENTAL FREE TRADE AREA (AFCFTA)



CPTPP
=
Trans-Pacific
Partnership
minus US



RCEP

Regional
Comprehensive
Economic
Partnership



Other Policies to **Encourage Globalization**



- IMF/World Bank
 - Policy advice to open markets (the "Washington Consensus")
 - Loans to countries conditional on
 - Reducing trade barriers
 - Permitting capital flows
- GATT/WTO (World Trade Organization) [More on this later, if time]
 - Negotiate reciprocal trade liberalization
 - Settlement of trade disputes (usually about interfering with trade)
- Bilateral Investment Treaties
 - Better treatment of multinational corporations





Policies that Discourage Globalization

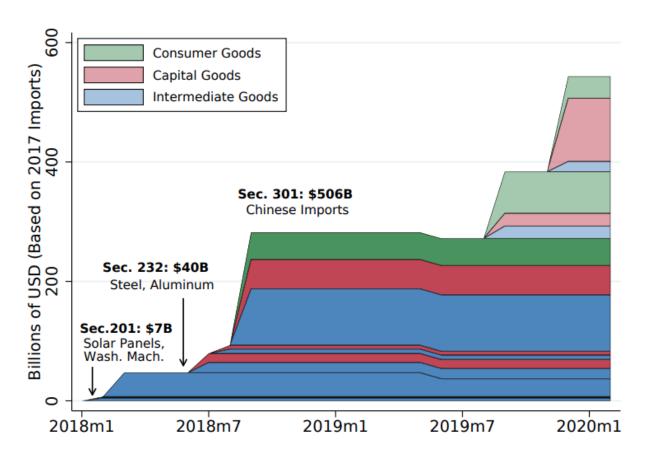




Trump's Tariffs and Trade War

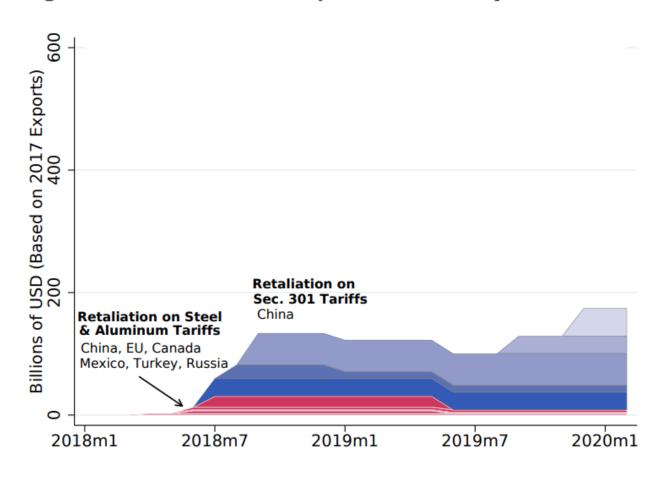


Figure B1: Composition of New U.S. Import Tariffs: 2018-2019

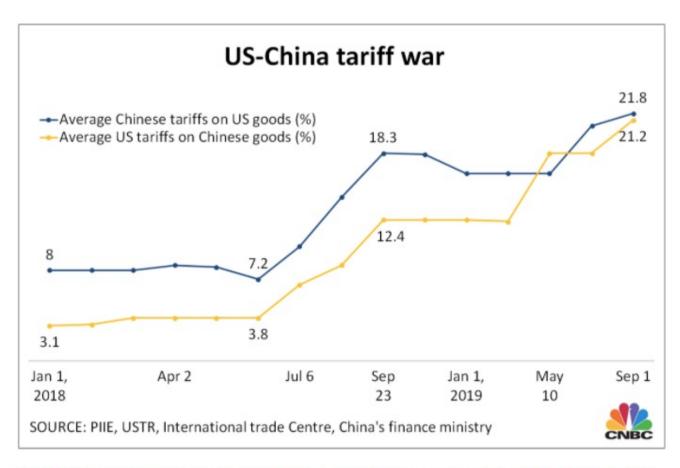


Source: Flaan & Pierce 2020

Figure 3: Timeline of Retaliatory Tariffs on U.S. Exports: 2018-2019



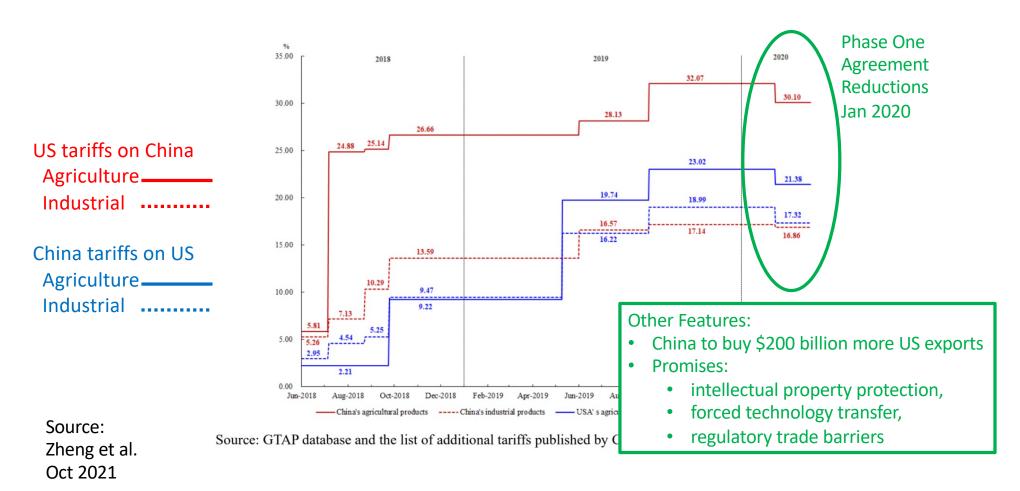
Source: Flaan & Pierce 2020



The first trade salvo was fired by the U.S. in early 2018, but the bilateral trade war between the U.S. and China really kicked into a higher gear in July 2018.

Source: CNBC.com

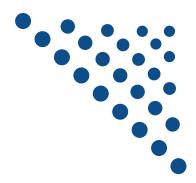
Figure 1. China-US bilateral import tariff increases, percentage points.





Effects of Tariffs





A tariff is a tax on imports. It causes

- A rise in the price of the imported good in the importing country
- A fall in the price of the imported good in the exporting country
- The quantity imported to fall
- The revenue of the tariff-levying government to rise

Almost always: the <u>rise</u> at home is much larger than the <u>fall</u> abroad

- That's especially true if importing country is small
- But it's also true if importing country is as large as the U.S.
- Example: Trump's tariffs caused US prices to rise, with hardly any perceptible fall in prices abroad.

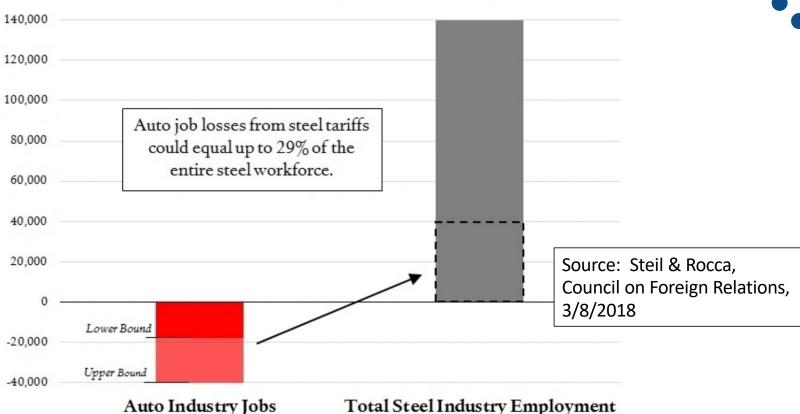




- The rise in price in the importing country causes
 - A rise in price of competing goods produced there
 - Benefits to those producers
 - Harm to buyers of both the import and the competing goods
 - Including producers that use the higher-priced goods as inputs
 - Their prices also rise, hurting their buyers
 - Employment changes:
 - o Increase in the protected industry
 - Decrease in industries that use the protected product as inputs
 - Example: Trump's 25% tariff on steel
 - Helped US steel firms and their workers
 - Hurt US auto firms and workers
 - and many other industries that use steel



U.S. Auto Jobs Jeopardized by Trump's Steel Tariffs





Lost by 2019

Total Steel Industry Employment



- "Nationally, steel and aluminum tariffs resulted in at least 75,000 job losses in metal-using industries by the end of last year [2019],
 - according to an analysis by Lydia Cox, a Ph.D. candidate in economics at Harvard University, and Kadee Russ, an economics professor at the University of California, Davis."

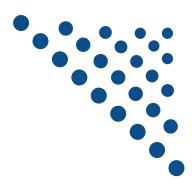




- If the tariff is on exports from only one country (e.g, China)
 - Buyers shift to imports from other, more costly, countries (e.g., Vietnam)
 - Sellers shift to export to other countries that pay less
 - Both lose a little



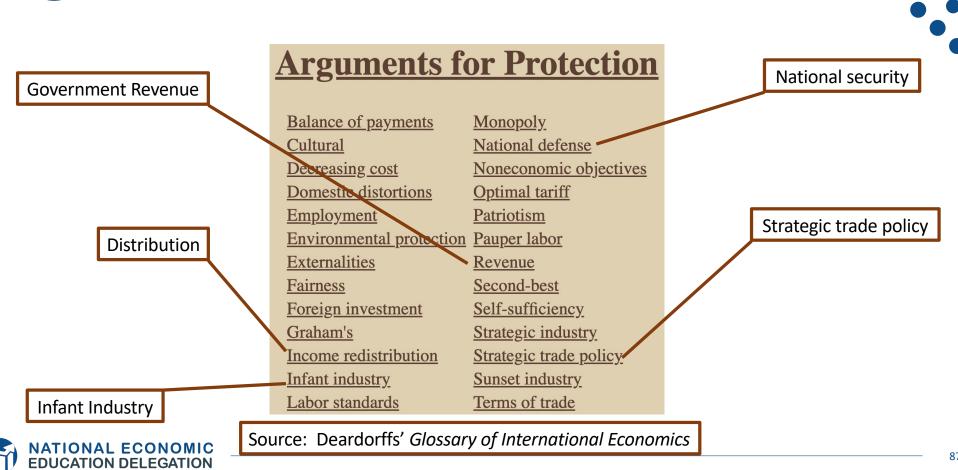
Arguments for and against tariffs



- If economists are so opposed to tariffs, why are they used?
- Arguments <u>for</u> protection
 - Many have been used, both past and present
 - Some are potentially valid, but better policies exist
 - See the list in my Glossary of International Economics



Arguments for tariffs



Arguments against tariffs



• Arguments <u>against</u> tariffs

- Economic gains from trade (see above)
- Tariffs prompt retaliation
- Some valid arguments for tariffs depend on information that is either
 - o Unavailable, or
 - Available only from the protected industry
- Even when net beneficial, tariffs are politically hard to remove
- > Lower tariffs and greater trade reduce the likelihood of war



Skip to Conclusions





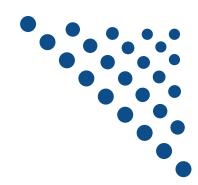
- Countries have negotiated trade agreements throughout history
 - At least back to the 1500's between the Ottoman Empire and the powers of Europe
 - The first "free trade agreement" (FTA) was between Britain and France in 1860, soon followed by many more
 - Removed tariffs on trade with each other
 - US used "reciprocal trade agreements" starting in 1934 to reduce tariffs and dig out of the Great Depression
 - US led negotiation of multilateral agreements via
 - o GATT (General Agreement on Tariffs and Trade) 1948
 - WTO (World Trade Organization) 1995



- Trade Agreements (both WTO & FTAs)
 - Promote trade by
 - Reducing tariffs
 - Blocking policies that discriminate against imports
 - But they also do much else, mostly to serve business interests:
 - Permit anti-dumping duties to deter competition
 - Protect intellectual property (patents, etc.)
 - Allow investor action against governments







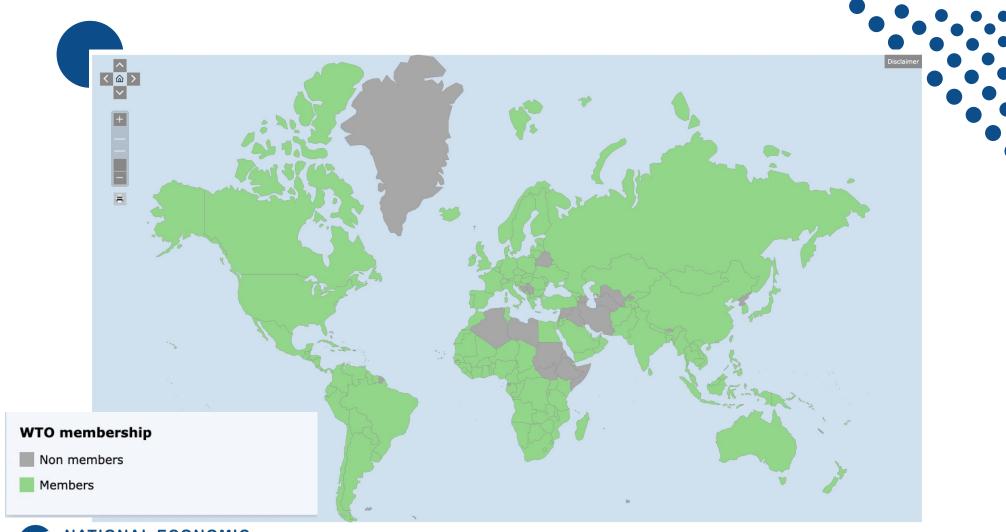
WTO

- 164 member countries
- Includes
 - China since 2001
 - Russia since 2012
 - Not Iran, N. Korea
- Headquarters Geneva, Switzerland











The WTO has

- Three Parts:
 - 1. GATT (Still exists, as largest part of WTO)
 - limits tariffs
 - Permits exceptions (anti-dumping, etc.)
 - 2. GATS = General Agreement on Trade in Services
 - 3. TRIPs Agreement = Trade Related aspects of Intellectual Property Rights
- Two Basic Principles
 - Most Favored Nation (Don't discriminate among exporters)
 - 2. National Treatment (Don't discriminate against imports)

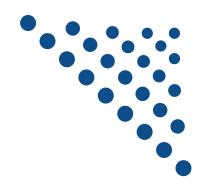




The WTO's Main Functions

- Negotiation of reduced trade barriers
 - Tariffs (GATT did this well; WTO has not)
 - Removal of other barriers
- Dispute settlement
 - Countries bring cases against others
 - WTO "panels" and "Appellate Body" decide





WTO Negotiation

- Ministerial Meetings
 - Held every ~2 years 1996-2017
 - Most recent, #12, was delayed,
 - But happened June 12-17, 2022, in Geneva
 - Didn't do much: Ended subsidies to illegal fishing
 - Next, #13, will be in 2024, in United Arab Emirates

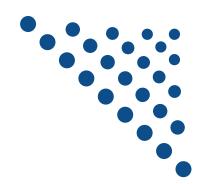




WTO Negotiation

- Agreements
 - Multilateral (all members)
 - None on tariffs
 - A few on other measures (e.g., export subsidies in agriculture)
 - Plurilateral (willing members)
 - Government procurement
 - Information technology
 - Telecoms
 - Financial services





WTO Dispute Settlement

- There have been 616 cases initiated since 1995 (as of 4/23/23)
- About 90% have been decided in favor of the complainant, both by US (132) and against US (168)
- The mechanism has been unable to decide cases since December 10, 2019 when
 - President Trump blocked appointments to Appellate Body
 - President Biden has not changed this





Globalization's Future?



Globalization's Future?



- Will trade, travel, etc. come back?
 - Yes, but never resume the pre-2008 growth
 - They've been hit hard by financial crisis, trade war, pandemic, and now war
- Will attitudes change?
 - Yes.
 - Firm's will try to limit exposure ("just in case" instead of "just in time")
 - Consumers may learn to live differently
 - Reported July 20: Biden administration wants "friend-shoring." No mention yet of policies.
- Will economists' views of globalization change?
 - I think so.
 - We still think globalization is good overall,
 - But we're learning that it needs to include
 - Reduced reliance on single sources
 - Greater protections for those who are hurt.







Trade Deficits and Exchange Rates

Speaker: Me



Trade Deficits and Exchange Rates











Any Questions?

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